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APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/715,879 11/17/2003		11/17/2003	Bruce A. Phillips	020366-089800	5286		
20350	7590	04/07/2006		EXAM	EXAMINER		
		TOWNSEND A	woo, st	WOO, STELLA L			
TWO EMBA		RO CENTER		ART UNIT	PAPER NUMBER		
SAN FRAN	CISCO,	CA 94111-3834	2614				

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N	o.	Applicant(s)				
	10/715,879		PHILLIPS ET AL.					
Office Action Sun	Examiner		Art Unit					
		Stella L. Woo		2614				
The MAILING DATE of the Period for Reply	s communication app	ears on the co	rer sheet with the c	orrespondence add	dress			
A SHORTENED STATUTORY I WHICHEVER IS LONGER, FRO Extensions of time may be available under after SIX (6) MONTHS from the mailing da If NO period for reply is specified above, th Failure to reply within the set or extended   Any reply received by the Office later than earned patent term adjustment. See 37 Ci	DM THE MAILING DA the provisions of 37 CFR 1.13 te of this communication. e maximum statutory period w period for reply will, by statute, three months after the mailing	ATE OF THIS ( 36(a). In no event, he will apply and will exp cause the application	COMMUNICATION owever, may a reply be tim ire SIX (6) MONTHS from 8 in to become ABANDONE	N. nely filed the mailing date of this co D (35 U.S.C. § 133).				
Status								
<ol> <li>Responsive to communication</li> <li>This action is FINAL.</li> <li>Since this application is in closed in accordance with</li> </ol>	2b)☐ This condition for allowan	action is non-face except for	ormal matters, pro		merits is			
Disposition of Claims								
4) Claim(s) 1-54 is/are pendidated Aa) Of the above claim(s)  5) Claim(s) is/are allo  6) Claim(s) 1-54 is/are reject  7) Claim(s) is/are object  8) Claim(s) are subject  Application Papers  9) The specification is objected and applicant may not request the Replacement drawing sheet(sheet)  11) The oath or declaration is objected and applicant may not request the Replacement drawing sheet(sheet)	is/are withdraw wed.  ed. ected to. et to restriction and/or ed to by the Examiner is/are: a) acce at any objection to the c is) including the correction	vn from consid r election requi r. epted or b) \( \bigcup c drawing(s) be he ion is required if	rement.  bjected to by the End in abeyance. See the drawing(s) is objected to be the drawing(s) is objected.	e 37 CFR 1.85(a). ected to. See 37 CF				
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawii  3) Information Disclosure Statement(s) (I Paper No(s)/Mail Date	ng Review (PTO-948)	5) [	Interview Summary ( Paper No(s)/Mail Da Notice of Informal Pa Other:	ite	)-152)			

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#### **DETAILED ACTION**

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## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jette et al. (US 2004/0213286 A1, hereinafter "Jette") in view of Warden et al. (US 2003/0189935 A1, hereinafter "Warden").

Regarding claims 1, 3, 6-16, Jette discloses a network interface device (Broadband Home Unit (BHU) 100; Figures 4 and 7), comprising:

an external interface (fiber tray 106 receives a plurality of telecommunication services via optical fiber 41);

at least two distinct internal interfaces (electrical terminals 116 distribute the plurality of telecommunication services to POTS, 10/100 Base-T Ethernet, coaxial cable, etc.; paragraph 43); and

a processor (PON Interface Board 200/ Residential Service Interface Board 300) programmed to:

receive a control signal to modify the configuration of the external interface, the control signal initiated remotely by the telecommunication service

provider (the enter BHU 100 can be configured and controlled upon request by the OLT; paragraph 66);

receive combined signals (dual-port bidirectional WDM device 202; paragraph 67);

process the combined signals into separate signals (communications processor 302);

map each of the separate signals for distribution at the customer's premises (user data traffic is routed to Ethernet PHY device 312 and PCM voice traffic is routed to DSP 304 for distribution; paragraphs 76-78).

Jette differs from claims 1, 3, 6-16 in that it does not teach one the of at least two distinct internal interfaces being allocated at least a specified amount of bandwidth available through the fiber optic connection. However, Warden teaches the desirability of providing QoS guarantees, that is, minimum bandwidth and maximum latency, between two devices in a fiber channel environment (paragraphs 8, 25, 30, 57, 162) such that it would have been obvious to an artisan of ordinary skill to incorporate such QoS guarantees, as taught by Warden, within the system of Jette in order to suitably receive realtime audio and video streaming information.

Regarding claim 2, Jette provides for using Internet Protocol (paragraphs 34, 85).

Regarding claims 4, 5, in the upstream direction, PON transceiver combines assembled PCM data and assembled user data traffic for

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multiplexing at WDM device 202 and transmission onto optical fiber 41 (paragraphs 80-81).

Regarding claim 17, Jette provides for connection to a HomePNA (paragraph 91).

Regarding claim 18, telecommunication services originate from a PSTN voice provider and ATM network data provider (see Figure 1).

Regarding claims 19-36, in addition to the network interface device described in the combination of Jette and Warden above, Jette discloses an external transport medium comprising fiber optic distribution system (fiber optical network support VoIP; Figures 2A, 2B, paragraph 34).

Method claims 37-54 recite steps carried out by the combination of Jette and Warden as described above.

## Response to Arguments

2. Applicant's arguments with respect to claims 1-54 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply

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is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stella L. Woo whose telephone number is (571) 272-7512. The examiner can normally be reached on Monday-Friday, 8:00 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stella L. Woo Primary Examiner Art Unit 2614